

A² cont'd portion of the sidewall and to expose a second portion of the sidewall; and
forming a gate electrode on the second portion of the sidewall and the upper surface.

31. (Amended) A method of manufacturing a semiconductor device comprising the steps of:

A³
forming a trench by etching a semiconductor substrate;
partially filling the trench with an isolation layer comprising an insulation material, which leaves upper sidewalls of the trench exposed, but covers an entire bottom of the trench;
forming a gate insulating layer on the upper sidewalls of the exposed trench and an upper surface of the semiconductor substrate adjacent to the trench; and
forming a gate electrode on the gate insulating layer.

Please enter new Claims 40 - 46 as follows:

40. (New) A method of manufacturing an integrated circuit device, comprising:
forming a mesa structure having sidewalls and a top surface in a substrate; and
forming a gate electrode on the mesa structure that extends across the top surface and down respective upper portions of the sidewalls.

41. (New) The method of Claim 40, wherein forming the gate electrode comprises:
A⁴
forming a gate insulating layer on respective upper portions of the sidewalls; and
forming the gate electrode on the gate insulating layer.

42. (New) The method of Claim 40, further comprising:
forming an isolation layer comprising an insulating material on respective lower portions of the sidewalls.

43. (New) The method of Claim 42, wherein forming the mesa structure comprises:
forming a pair of trenches on opposing sides of the mesa structure; and wherein

forming the isolation layer comprises:

forming the isolation layer in the respective trenches so as to cover the respective lower portions of the sidewalls.

44. (New) The method of Claim 43, wherein forming the isolation layer further comprises:

forming a buffer layer in the respective trenches; and

forming the isolation layer on the buffer layer in the respective trenches.

45. (New) The method of Claim 44, wherein forming the isolation layer further comprises:

forming a liner layer on the buffer layer; and

forming the isolation layer on the liner layer in the respective trenches.

46. (New) The method of Claim 40, further comprising:

forming an impurity layer in the top surface and the respective upper portions of the sidewalls.

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